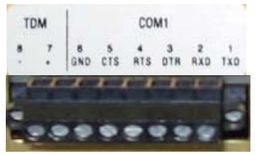
Encompass™ 6 Multi-Protocol Reader Quick Reference Sheet

1 **Antenna Multiplexing/Check Tag/RF System Test**
Recommended Data Cable: 9-pin ribbon cable
Recommended Check Tag Antenna Cable: 50-ohm coaxial cable
MPR jack is DB9 socket connector

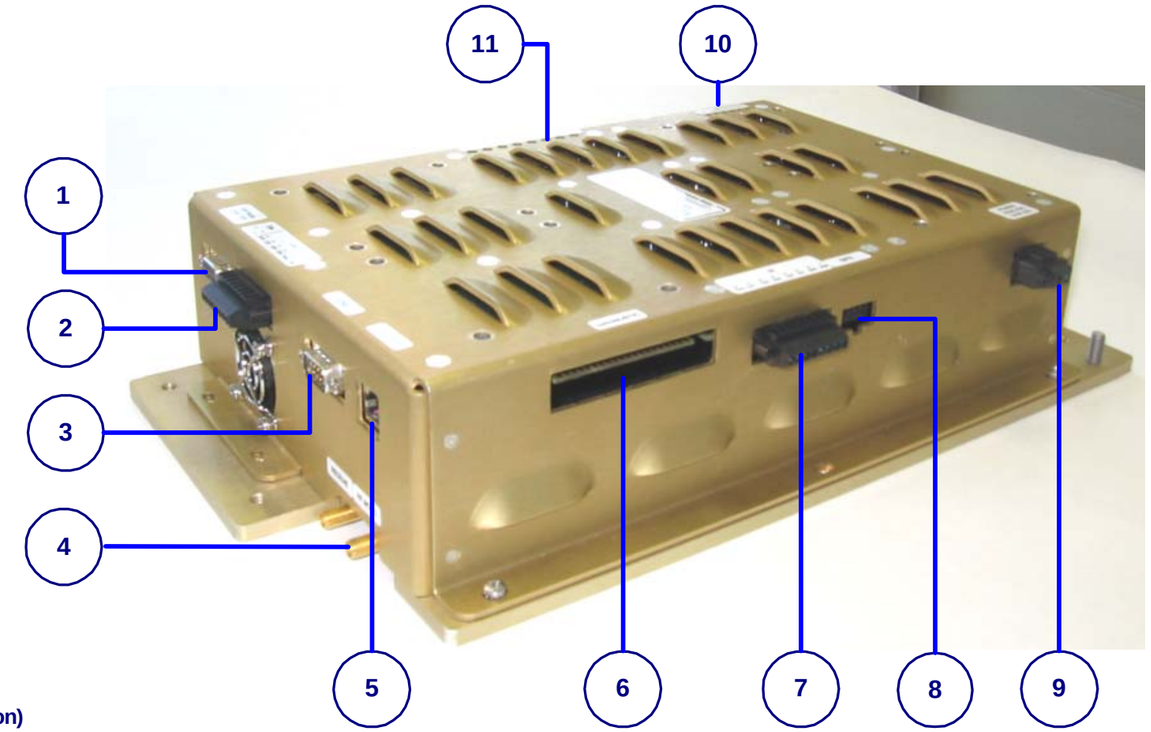
2 **TDM/COM1 Port**
Recommended Data Cable: 20 AWG cable
Mating connector installed on MPR jack



3 **COM2 Port**
Recommended Cable: 20 AWG cable
MPR jack is DB9 plug connector

4 **Antenna Port**
Recommended Cable: 50-ohm coaxial cable
(use the rightside port for single-antenna installation)

5 **Ethernet**
Recommended Data Cable: T568A or T568B
Maximum Length: 330 feet (100 m)
RJ-45 jack



Diagnostic Test Port **6**
Use with Diagnostic Breakout Box for the Encompass 6 Multi-Protocol Reader

External Digital Input/Output **7**
Data Cable: 20 AWG wire
Mating connector installed on jack

GPS Timing **8**
Data Cable: 20 AWG
Antenna Cable: 50-ohm coaxial cable

Power (19V DC to 30V DC) or (19V AC to 27V AC) **9**
Power Cable: 12-30 AWG cable
Mating connector installed on MPR jack

Power LEDs **10**
(see other side for descriptions)

Operational/Error LEDs **11**
(see other side for descriptions)

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Start Up

Perform the following startup procedures:

1. Connect antenna to MPR at antenna port.
2. Connect COM2 or Ethernet cable depending on communications.
3. Connect other options as needed.
4. Connect DC or AC power to MPR. Power LEDs should light.
5. Set RF using Set Frequency command.
6. Set other commands as required for your application.
7. Send Set Mode command to MPR from host.

Operational LEDs (item 11 from other side)

OPERATIONAL LED			INDICATION
Three Fault Indication LEDs			
ERR3	ERR2	ERR1	Failure Mode
○	○	○	No failure
○	○	●	Power supply failure
○	●	○	TDM/GPS failure
○	●	●	RF board communication failure
●	○	○	RF DAC out of range
●	○	●	RF PLL unlocked
●	●	○	Other failures
●	●	●	Microprocessor resetting
RDR			MPR communicating with host
LC			Host communicating with MPR
TIF			MPR transacting with tag. LED lit when MPR receives correctly decoded tag message including correct CRC for message. The LED is lit for 250 milliseconds (ms) following a tag transaction.
UL			RF uplink signal on
DL			RF downlink signal on

Power LEDs (item 10 from other side)

POWER LED	Indication
PWR	19V to 30V DC or 19V to 27V AC supplied
+5	+5 volt power supply functioning
+10.5	+10.5 volt power supply functioning
+5.5	+5.5 volt power supply functioning
+7	+7 volt power supply functioning
-5.5	-5.5 volt power supply functioning

Troubleshooting

Perform these troubleshooting procedures:

1. Make sure all connectors are secure.
2. Make sure MPR is powered up by checking Power LEDs.
3. Make sure MPR is communicating with host.

If system does not respond to troubleshooting, contact TrAC at 1-800-755-0378.

For support, contact the TransCore Action Center at: 1-800-755-0378

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